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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/062,404	02/05/2002	Masaki Ohira	29287/127	6186

23838 7590 09/14/2004

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WASHINGTON, DC 20005

EXAMINER

TORRES, JOSEPH D

ART UNIT	PAPER NUMBER
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2133

DATE MAILED: 09/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/062,404	OHIRA ET AL.	
	Examiner	Art Unit	
	Joseph D. Torres	2133	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/387,895.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>02/05/2002</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: '420' and '430' in Figure 5; '4', '5' and '6' in Figure 8; 'S9-7' in Figure 9; '130-1', '139-1', '149-1', '140-1', '140-2', '149-2', '139-2', '130-2', '510', '150' and '160' in Figure 13; '140' and '149' in Figure 14; and '130', '131', '132' and '139' in Figure 15. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. The abstract of the disclosure is objected to because it does not reflect the current claimed invention of claim 1. Correction is required. See MPEP § 608.01(b).

37 C.F.R. 1.71, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms, which are not clear, concise and exact. The specification should be revised carefully in order to comply with 37 C.F.R. 1.71, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are:

- On page 2, line 6; "On a while" is not a recognizable idiomatic English expression.
- On page 2, lines 12-15; the sentence "As a representative..." is incomprehensible.
- On page 5, line 8; it is not clear what "Fig." refers to.

A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.

A substitute specification excluding the claims is required pursuant to 37 CFR 1.125(a) because as pointed out above, the specification is replete with grammatical errors.

A substitute specification filed under 37 CFR 1.125(a) must only contain subject matter from the original specification and any previously entered amendment under 37 CFR 1.121. If the substitute specification contains additional subject matter not of record, the substitute specification must be filed under 37 CFR 1.125(b) and must be accompanied by: 1) a statement that the substitute specification contains no new matter; and 2) a marked-up copy showing the amendments to be made via the substitute specification relative to the specification at the time the substitute specification is filed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Upp; Daniel C. et al. (US 4967405 A, hereafter referred to as Upp) in view of Tomizawa; Masahito et al. (US 5574717 A, hereafter referred to as Tomizawa).

35 U.S.C. 103(a) rejection of claim 1.

Upp teaches a transmission apparatus, comprising: a first optical signal receiver which receives a first optical signal transmitted from a first transmission path (Vitesse 8010 IC chip and Scrambler/MUX Protection 200 receiving/transmitting means in Figure 1 of Upp comprise a first optical signal receiver which receives a first optical signal transmitted from a first transmission path in a modular, expandable cross-connect system for transmitting optical SONET formatted signals); a second optical signal receiver which receives a second optical signal transmitted from a second transmission path (claim 29 in Upp teaches a plurality of Vitesse 8010 IC chip and Scrambler/MUX Protection 200 receiving/transmitting means including a second optical signal receiver which receives a second optical signal transmitted from a second transmission path;

see Figure 1 of Upp); a first optical signal transmitter which transmits a third optical signal onto a third transmission path (Vitesse 8010 IC chip and Scrambler/MUX Protection 200 receiving/transmitting means in Figure 1 of Upp comprise a first optical signal transmitter which transmits a third optical signal onto a third transmission path); a second optical signal transmitter which transmits a fourth optical signal onto a fourth transmission path (claim 29 in Upp teaches a plurality of Vitesse 8010 IC chip and Scrambler/MUX Protection 200 receiving/transmitting means including a second optical signal transmitter which transmits a fourth optical signal onto a fourth transmission path; see Figure 1 of Upp); an interface for distribution system (Virtual Tributary Cross-Connect 900 in Figure 1 of Upp is an interface for distribution system); and a cross connect switch which exchanges electric signals from said first and second optical signal receivers and said interface for distribution system, and which sends out them into said first or second optical signal transmitter, or into said interface for distribution system (Wide Band Cross-Connect 800 in Figure 1 of Upp is a cross connect switch which exchanges electric signals from said first and second optical signal receivers and said interface for distribution system, and which sends out them into said first or second optical signal transmitter, or into said interface for distribution system), wherein, a decoder for parity code of said first or second optical signal receiver and an encoder for parity code of said first or second optical signal transmitter are independently controllable for each (col. 11, lines 38-40 in Upp teach that a parity code generator and checker, i.e., decoder, are employed in each of the mutually independent SPT blocks

400 of Figure 1 in Upp). Note: parity codes can be used for either error detection or error correction or both.

However Upp does not explicitly teach the specific use of error correcting codes for the BIP-8 B1 parity code taught in Upp (col. 11, lines 38-40 in Upp).

Tomizawa, in an analogous art, teaches the specific use of error correcting codes for BIP-8 B1 parity codes (col. 12, line 32-35, Tomizawa).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Upp with the teachings of Tomizawa by including use of error correcting codes for the BIP-8 B1 parity code taught in Upp. This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would have recognized that use of error correcting codes for the BIP-8 B1 parity code taught in Upp would have provided the opportunity to improve data integrity.

Conclusion

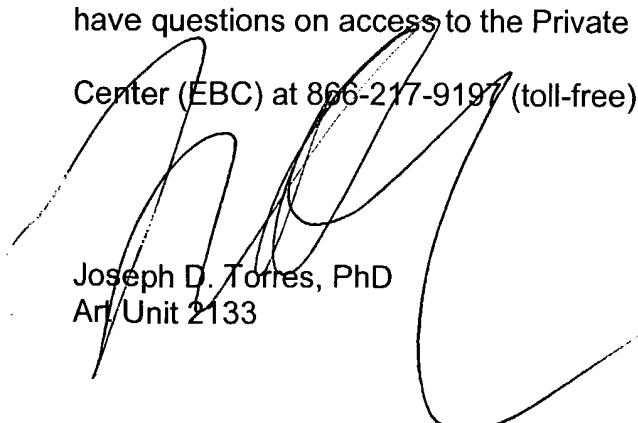
4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tyrrell; Raymond E. et al. (US 5185736 A) teaches a transmission system comprising a fiber optic transmission system, terminal multiplexers and add/drop multiplexers which combine to form a system for terminating and adding lower speed channels to a high speed channel conforming to the SONET standard, as well as to interface high speed channels, including SONET high speed channels, to higher speed SONET channels. Neches; Philip M. et al. (US 5303383 A) teaches a

scalable multi-stage interconnect network 14 for multiprocessor computers. Cohen; Aaron Y. (US 5506956 A) teaches an apparatus for providing highly reliable, substantially error-free communication on T1 links for use in, preferably, private communication networks.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D. Torres whose telephone number is (703) 308-7066. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (703) 305-9595. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Joseph D. Torres, PhD
Art Unit 2133